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VIA ELECTRONIC MAIL AND FIRST CLASS U.S. MAIL

January 12, 2007

John Baza – Director (johnbaza@utah.gov)
 Pamela Grubaugh-Littig – Permit Supervisor (pamgrubaughlittig@utah.gov)
 Division of Oil, Gas and Mining
 P.O. Box 145801
 Salt Lake City, Utah 84114-5801

Re: *Horse Canyon Mine, Lila Canyon Extension C/007/013 Permit Application*

Dear Director Baza:

On several occasions over the past six years SUWA has pointed out to the Division that there are fatal problems with UEI's reliance on the IPA wells for obtaining the required baseline hydrologic data. In its latest submittal of the MRP, UEI provides information that the IPA wells will never provide the required baseline data. Thus, the Division must not approve UEI's permit application until the company installs new suitable and appropriate water monitoring wells in order to obtain the required baseline data. We raise the following specific points for your review and consideration:

- The IPA wells are unsuitable for providing baseline water quality data.* To date, UEI has not collected a single sample of ground water from any of the IPA wells in order to satisfy the water quality baseline data requirement. Thus, UEI has no data from the deep, saturated, regional aquifer in the permit area. In its latest version of the MRP, UEI states that "[d]ue to limited pump capabilities in a 2-inch diameter well such sampling is not feasible. Therefore, the depth and diameter of the piezometer holes makes it impossible to use them for baseline quality sampling." (Emphasis added). In fact, in Appendix 7-11 UEI states that it never intended to collect water quality data from these holes. The IPA wells were drilled as coal exploration holes and completed with 2-inch diameter steel casing, which in addition to limiting the size of monitoring equipment that can be used, introduces iron contamination and compromises water quality data. Because UEI admits that these holes were not intended to, and can not provide baseline water quality data in the permit area, the IPA wells should be abandoned and new suitable and appropriate water monitoring wells should be installed within the permit area.
- The IPA wells are unsuitable for ground water monitoring.* As stated in the MRP, the IPA wells will be rendered unusable for monitoring by mining or subsidence. See

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Chapter 7, p. 58. The only "monitoring" that UEI proposes for the deep, saturated, regional aquifer is to document water inflow into the mine. As SUWA has previously pointed out, this monitoring plan is fatally flawed because in order to assess impacts from mining, it is necessary to have baseline data. Documenting water inflow into the mine in no way satisfies the requirement of monitoring, because there are no baseline data. Because the IPA wells will be destroyed by mining activities, there will be no means to assess the impacts to ground water quality due to mining. Thus, the IPA wells should be abandoned and new suitable and appropriate water monitoring wells should be installed in the permit area that can be continuously monitored before, during and after mining.

- The IPA wells are not representative of the permit area. As SUWA has previously noted, the area covered by the IPA wells is less than 200 acres, or approximately 4 percent of the 4,664-acre permit area. This limited area does not adequately represent the ground water conditions in the deep, saturated, regional aquifer in the permit area. UEI should install new water monitoring wells that will provide water quantity and quality data representative of the entire permit area.
- UEI has an incomplete understanding of the permit area hydrology and needs additional data points. The latest version of the MRP reviewed by SUWA (submitted to the Division on December 1, 2006) still contains incomplete, conflicting, and/or incorrect interpretations of the permit area ground water resources. For example, UEI fails to identify the recharge and discharge areas of the deep, saturated, regional aquifer. UEI also fails to correctly portray the piezometric surface in cross section. UEI fails to explain the significance of the artesian conditions causing the water level to rise as much as 800 feet above the completed section of the IPA wells. UEI fails to address the 24-foot rise in the water level in IPA-1 between 1994 and 2005. UEI fails to consistently and completely address the effect of faults, lithology, and regional structure on the occurrence, movement, or discharge of ground water, and have failed to identify renewable resource lands. Clearly, additional data are required in order to address these deficiencies and inadequacies and meet the requirements of the coal rules. New water monitoring wells, at appropriate locations, would provide the potential to obtain the baseline data upon which meaningful interpretations could be made.

SUWA provides this information to the Division as the Division reviews recent submission from UtahAmerican Energy and also in support of SUWA's position that the Division must deny the permit application.

Sincerely,

/s/ Stephen Bloch 

Stephen Bloch
Staff Attorney